

## **Inter-municipal electronic ID-Ticket system** **(Tallinn, Estonia)**

### **Topic**

Integrated ticketing

### **Summary**

The main driving force for this project was the goal to enforce citizens to use safer and cheaper personal tickets, and to create better revenues for the city from ticket sales. The basic ID-Ticket project started in 2004 and was followed by the inter-municipal ID-Ticket, launched in August 2005.

The inter-municipal ticket was a demand from the citizens, as there are more than 100,000 made in Greater Tallinn area by citizens over the municipal border everyday by different means of transport. The "ID-ticket" system utilises the national electronic cards, equipped with an electronic chip, to sell personalised fare rights. Passengers no longer have to have physical tickets to prove their right for a trip but use the ID card to enable an e-ticket database check-up.

### **Case Study**

#### **Introduction**

The city of Tallinn and neighbour municipalities have decided to improve the quality of the public transportation, due to the dramatically increase of private cars in the area.

Therefore, the city has decided to implement an inter-municipal electronic ID-Ticket system for public transportation. It was launched in August 29, 2005 (developed and operated by AS Sertifitseerimiskeskus (Certification Centre)) and it is an electronic rights management and payment collection concept comprising software, hardware, and procedures.

#### **Basic facts**

The Estonian national ID card is the first mandatory document for all Estonian residents, including Estonian citizens and resident aliens. The function of the ID card is twofold: first, as a regular ID, and second, as an electronic identity, enabling users to use services online conveniently and securely. It is also possible to use the ID card to give digital signatures.

Currently an operated version of the e-ticketing system is under the brand name "ID-ticket" in the public transport system of the capital Tallinn and as well for surrounding Harju County.

The "ID-ticket" system utilises the national electronic cards, equipped with an electronic chip, to sell personalised fare rights. Passengers no longer have to have physical tickets to prove their right for a trip but use the ID card to enable an e-ticket database check-up.

Now this service is also available in inter-municipal public transportation in Greater Tallinn Area (city of Tallinn and surrounding municipalities in Harju County), as there is a tremendous traffic between municipalities every day (ca. 100,000 persons by different means of transport).

### Users and stakeholders

The service is the result of the cooperation between municipalities, As Sertifitseerimiskeskus (Certification Centre), banks, phone and mobile companies, Post office and R-Kiosk newspaper stands.

Every person who uses public transport in Tallinn and Harju County can be benefited from this initiative since approximately, 90% of the adult population has a national ID card.

### Implementation set-up

The basis of the service is the ID card. This was chosen for several reasons; but the main reason was the necessity of personalised tickets because of different pricing for residents of the municipality. In the case of the ID-Ticket, it enables automated checks from the population registry using the personal ID code, and it makes easy to sell and check personalised tickets on-line.

The advantages of the ID-Ticket System are:

- The system is a flexible tool for planning transport policy
- The municipality can support residents (local tax payers)
- Tickets are personalised
- Pricing for residents may be different
- Distribution cost are reduced because printing and delivering paper tickets is unnecessary
- The system is fully online, user friendly and flexible
- The system solves the risk of forgery which tends to be a problem with the paper, plastic and other physical tickets
- Better service via extensive sales channel network, e.g. even mobile or fixed telephone may serve as sale points

From the customer's point of view there is no more uncomfortable handling of coins, banknotes and paper tickets. There is no need to go somewhere to purchase a ticket, no need for a parent to give the ticket money to a child. All that is needed is a phone or a computer with an internet connection. The customer can activate the ticket by making a phone call or using internet browser.

The electronic payment collection system stores the following data on ID-tickets:

- Type of ID-ticket
- Personal ID code of the user
- Beginning and end date of the validity of the ID-ticket
- ID-ticket price and sales point
- Information on the distributor of ID-tickets (for statistics)

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The Operator will disclose information on ID-tickets and users to the Inspector to the extent that is necessary for controlling ID-tickets. The Inspector will insert the user's ID card into the controller device, which will display the personal ID code of the user. As an exception for users who do not have an ID card, but other document with ID number – passport or school ID card for people under 15 – the Inspector will introduce the personal ID code manually. On the basis of the personal ID code, the payment collection system will provide to the control device whether the user has a valid ticket and what type it is.

The ticket revenue from the public transport is about 40% of the total cost of the service.

The personal ID-tickets are cheaper than the paper based bearer tickets. City promotes ID-tickets as cheaper, personal, replaceable and easy-to-obtain tickets.

### *Future prospects and conclusions*

Better sales of the tickets, also better inspection of the validity tickets are the key issues to generate better revenues from the ticket sales. This is the reason for the City to improve ticket sales.

The system also gives the possibility to launch new types of tickets for inter-municipality transport services without additional printing and distribution costs.

In near future, the social benefit tickets will be generated automatically, i.e. if a person is registered as a person with disability or a social benefit user, the back-office system automatically generates the right to travel free of charge in public transport with the personal ID-ticket.

### **Links**

[www.nowinnovations.com](http://www.nowinnovations.com)

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